

```

*Multilayer Perceptron Network.
MLP STR_democratic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5
D6 D7 D8 D9
/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.000005
SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 17:10:46
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Science\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
	Missing Value Handling	Definition of Missing
Cases Used		Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax

```
MLP STR_democratic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .
```

Resources	Processor Time	00:00:00.45
	Elapsed Time	00:00:00.44

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample.

These cases are excluded from the analysis.

The following independent variables are constant in the training sample and are excluded from the analysis: D5.

Case Processing Summary

		N	Percent
Sample	Training	10	90.9%
	Testing	1	9.1%
Valid		11	100.0%
Excluded		93	
Total		104	

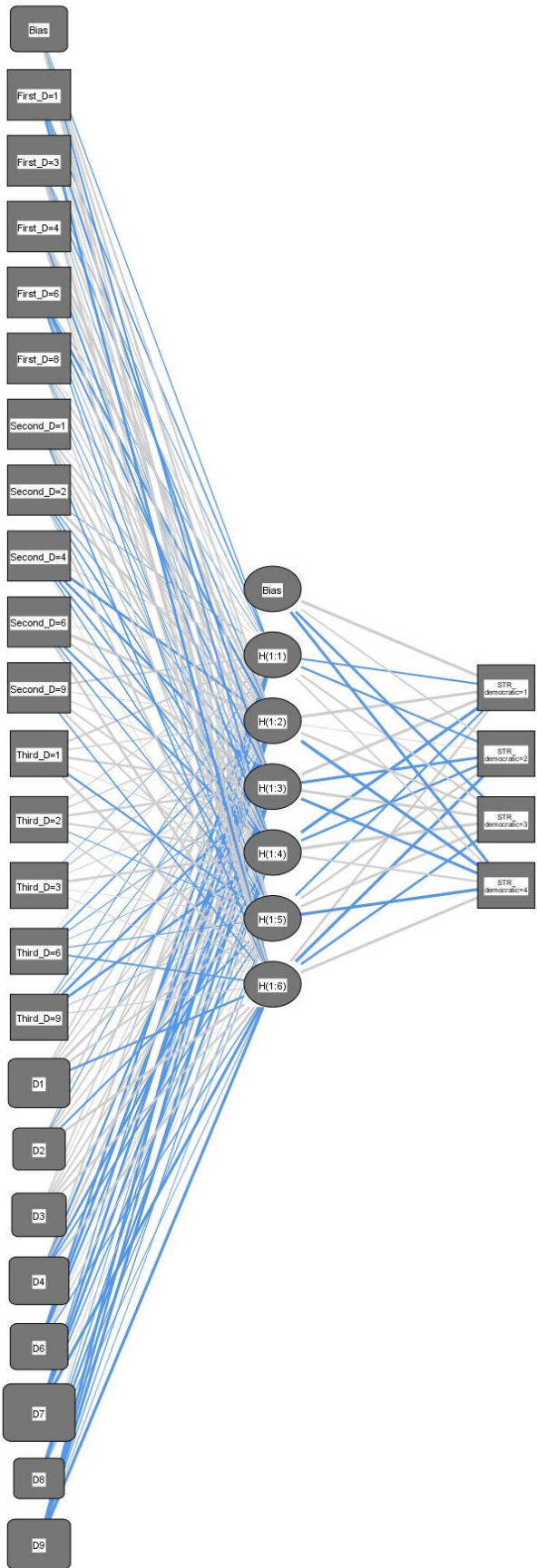
Network Information

Input Layer	Factors		
		1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	VIRUS DISSEMINATION
		6	LIFESTYLE CHANGES
		7	RIGHTS AND FREEDOMS INFRINGEMENT

	8	BUREAUCRATIC RESPONSE
	Number of Units ^a	23
	Rescaling Method for Covariates	Standardized
Hidden Layer(s)	Number of Hidden Layers	1
	Number of Units in Hidden Layer 1 ^a	6
	Activation Function	Hyperbolic tangent
Output Layer	Dependent Variables	1
		Democratic strategy
	Number of Units	4
	Activation Function	Softmax
	Error Function	Cross-entropy

a. Excluding the bias unit

— Synaptic Weight > 0
— Synaptic Weight < 0



Hidden layer activation function: Hyperbolic tangent
Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	6.714
	Percent Incorrect Predictions	30.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error ^a
	Training Time	0:00:00.02
Testing	Cross Entropy Error	1.825E-5
	Percent Incorrect Predictions	0.0%

Dependent Variable: Democratic strategy

a. Error computations are based on the testing sample.

Parameter Estimates

Predictor	Hidden Layer 1						Predicted	Output Layer			
	H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	H(1:6)	[STR_democ ratic=1]	[STR_democ ratic=2]	[STR_democ ratic=3]	[STR_democr atic=4]	
Input Layer											
(Bias)	-.265	.727	1.137	-.707	.491	1.588					
[First_D=1]	-.460	.333	-1.134	.316	.276	-1.421					
[First_D=3]	-.118	-.375	.638	-.068	.144	1.592					
[First_D=4]	.151	2.063	1.554	-.863	.176	1.140					
[First_D=6]	-.079	-1.393	-.752	.567	-.252	-.276					
[First_D=8]	.057	.839	.339	-.144	-.117	.328					
[Second_D=1]	.063	.991	.388	1.261	.657	-.522					
[Second_D=2]	-.129	1.563	-.252	-.519	-.206	.932					
[Second_D=4]	.136	-1.499	-1.219	-.728	-.343	.029					
[Second_D=6]	.032	1.635	1.352	-1.014	-.345	1.309					
[Second_D=9]	.640	.049	.212	.745	.763	-.395					
[Third_D=1]	.919	.275	1.055	.058	-.810	1.642					
[Third_D=2]	.208	.372	1.145	.789	-.153	.464					
[Third_D=3]	-.050	.543	.150	1.231	.021	.136					
[Third_D=6]	.014	-.589	-.178	-.011	-.186	-.624					
[Third_D=9]	-.171	-.147	-1.250	-1.395	-.004	.212					
D1	.430	.656	.339	1.567	1.060	-1.019					
D2	.610	-.242	.690	.423	-.734	1.305					
D3	.465	.113	.509	.633	.932	.804					

	D4	.745	-1.026	1.301	-1.217	-.610	1.211				
	D6	-1.302	-2.247	-.945	.162	.355	-.361				
	D7	-.371	-1.575	-1.518	-.373	.054	-1.935				
	D8	.029	-.095	-.415	-.948	-.227	-.100				
	D9	-1.939	-1.188	-2.456	-.252	-.092	-2.098				
Hidden Layer 1	(Bias)							1.947	.593	-1.378	-1.779
	H(1:1)							-.657	-.811	.812	.508
	H(1:2)							1.851	.043	1.242	-3.113
	H(1:3)							2.658	-1.630	1.758	-1.815
	H(1:4)							-2.764	-1.158	2.425	.809
	H(1:5)							-.860	1.065	1.337	-2.429
	H(1:6)							1.160	-2.556	-1.173	1.653

Classification

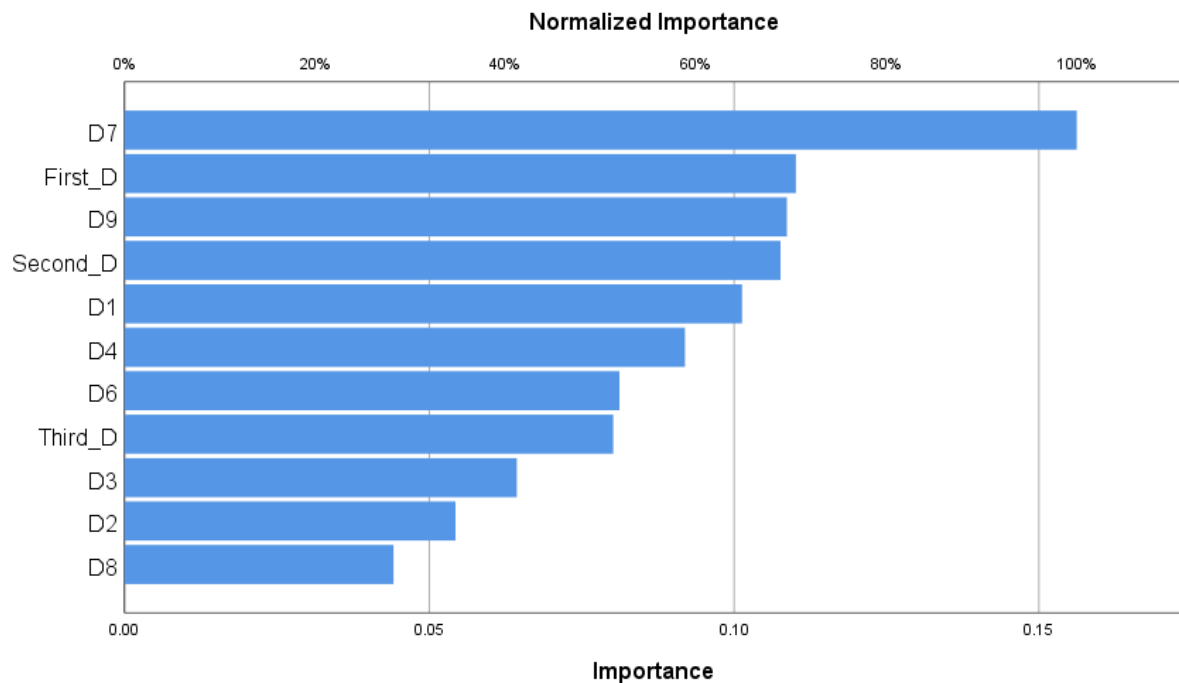
Sample	Observed	Predicted				Percent Correct
		worst option	mediocre option	good option	best option	
Training	worst option	3	0	0	0	100.0%
	mediocre option	1	2	0	1	50.0%
	good option	0	0	2	0	100.0%
	best option	1	0	0	0	0.0%
	Overall Percent	50.0%	20.0%	20.0%	10.0%	70.0%
Testing	worst option	1	0	0	0	100.0%
	mediocre option	0	0	0	0	0.0%
	good option	0	0	0	0	0.0%
	best option	0	0	0	0	0.0%
	Overall Percent	100.0%	0.0%	0.0%	0.0%	100.0%

Dependent Variable: Democratic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.110	70.5%
Second discourse in text	.108	68.9%
Third discourse in text	.080	51.3%
CONTACT RESTRICTION	.101	64.9%
SANITATION AND HYGIENE	.054	34.8%

ISOLATION OF INFECTED	.064	41.2%
TOTAL ISOLATION	.092	58.9%
VIRUS DISSEMINATION	.081	52.0%
LIFESTYLE CHANGES	.156	100.0%
RIGHTS AND FREEDOMS INFRINGEMENT	.044	28.2%
BUREAUCRATIC RESPONSE	.109	69.6%



```

*Multilayer Perceptron Network.
MLP STR_democratic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5
D6 D7 D8 D9
/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created	13-DEC-2020 17:10:53	
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling	not applicable	

Syntax

```
MLP STR_democratic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .
```

Resources	Processor Time	00:00:00.47
	Elapsed Time	00:00:00.45

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample.

These cases are excluded from the analysis.

Case Processing Summary

	N	Percent
Sample		
Training	8	72.7%
Testing	3	27.3%
Valid	11	100.0%
Excluded	93	
Total	104	

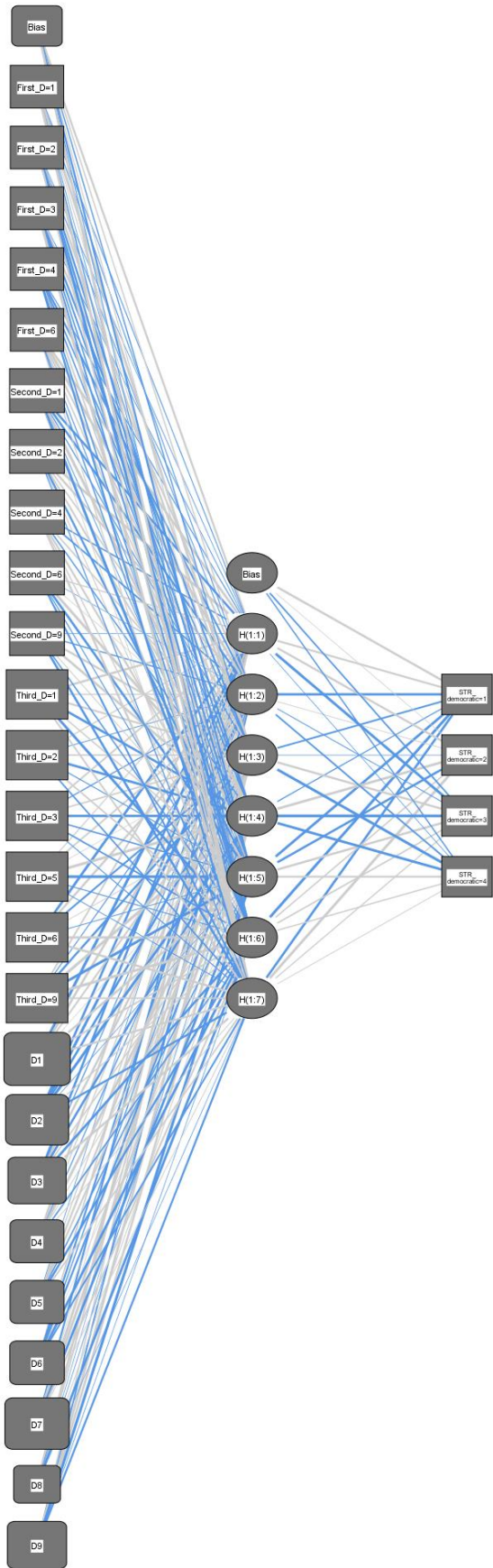
Network Information

Input Layer	Factors		
		1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

	9	BUREAUCRATIC RESPONSE
	Number of Units ^a	25
	Rescaling Method for Covariates	Standardized
Hidden Layer(s)	Number of Hidden Layers	1
	Number of Units in Hidden Layer 1 ^a	7
	Activation Function	Hyperbolic tangent
Output Layer	Dependent Variables	1 Democratic strategy
	Number of Units	4
	Activation Function	Softmax
	Error Function	Cross-entropy

a. Excluding the bias unit

— Synaptic Weight > 0
— Synaptic Weight < 0



Hidden layer activation function: Hyperbolic tangent
Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	4.002
	Percent Incorrect Predictions	12.5%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error ^a
	Training Time	0:00:00.03
Testing	Cross Entropy Error	2.400
	Percent Incorrect Predictions	33.3%

Dependent Variable: Democratic strategy

a. Error computations are based on the testing sample.

Parameter Estimates

Predictor	Hidden Layer 1							Predicted	Output Layer			
	H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	H(1:6)	H(1:7)		[STR_demo cratic=1]	[STR_demo cratic=2]	[STR_demo cratic=3]	[STR_demo cratic=4]
Input Layer (Bias)	.422	.177	-.159	.102	-.380	-.083	.554					
[First_D=1]	-.092	-.102	.634	.071	-.054	-.173	.714					
[First_D=2]	-.046	-.078	.434	-.369	-.396	-.866	.360					
[First_D=3]	-.063	.342	-.389	-.291	-.214	-.293	.830					
[First_D=4]	-.121	-.344	-.214	-.199	.244	-.227	-.403					
[First_D=6]	.543	.633	.323	.201	-.097	-.178	.127					
[Second_D=1]	-.482	-.448	-.136	.764	-.064	-.702	.042					
[Second_D=2]	.621	.399	.247	.334	-.424	.094	-.139					
[Second_D=4]	-.226	-.288	.261	-.178	.388	.156	.457					
[Second_D=6]	.168	-.014	.022	.694	-.536	-.124	-.349					
[Second_D=9]	-.024	-.175	.431	.553	.087	-.210	-.517					
[Third_D=1]	.468	.143	.368	-.521	.204	-.654	.312					
[Third_D=2]	.147	-.069	.250	-.570	-.120	.292	-.263					
[Third_D=3]	.322	-.144	.274	-.593	-.219	-.286	-.125					

[Third_D=5]	.135	.304	.004	.735	-1.059	-.115	-.068				
[Third_D=6]	-.615	.467	-.361	.060	-.071	.558	.488				
[Third_D=9]	.302	-.122	-.440	1.062	-.691	.835	.284				
D1	-.983	.564	.337	.010	.502	.317	.407				
D2	-.518	-.778	-.500	-.783	-.028	.151	-.428				
D3	-.501	-.129	.474	-.516	.195	-.555	.472				
D4	.479	.141	-.137	.662	.061	-.256	.055				
D5	-.044	.139	.393	.372	-.193	-.466	.284				
D6	.257	-.352	-.145	-.382	.006	-.592	-.321				
D7	-.363	.032	.644	.643	-.582	.346	.061				
D8	.537	.286	-.004	-.044	.073	-.576	-.017				
D9	.168	-.275	.607	.453	-.757	-.026	-.391				
Hidden Layer	(Bias)							.488	.027	-.285	-.181
1	H(1:1)							.383	.440	-.687	-.034
	H(1:2)							-.582	.049	-.077	-.309
	H(1:3)							-.318	-.026	.442	-.715
	H(1:4)							-.139	.599	-.895	-.632
	H(1:5)							-.610	-.495	.487	.358
	H(1:6)							-.724	.226	.266	.183
	H(1:7)							-.543	.699	.158	.063

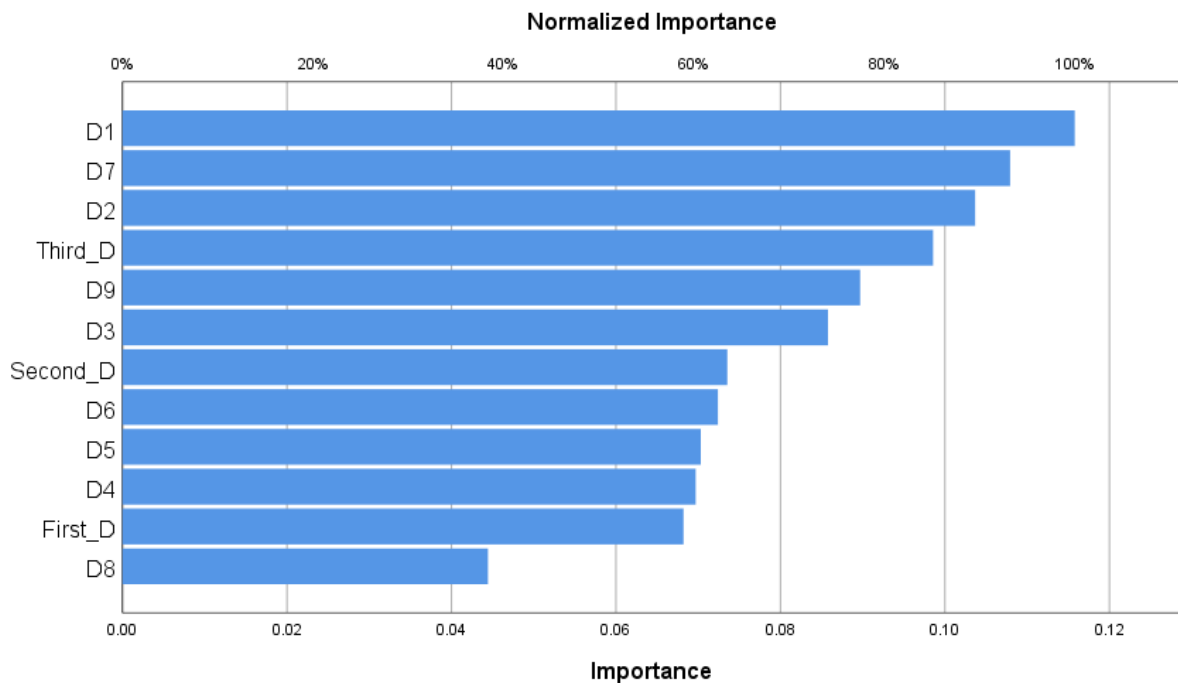
Classification

Sample	Observed	worst option	Predicted			Percent Correct
			mediocre option	good option	best option	
Training	worst option	2	1	0	0	66.7%
	mediocre option	0	2	0	0	100.0%
	good option	0	0	2	0	100.0%
	best option	0	0	0	1	100.0%
	Overall Percent	25.0%	37.5%	25.0%	12.5%	87.5%
Testing	worst option	0	1	0	0	0.0%
	mediocre option	0	2	0	0	100.0%
	good option	0	0	0	0	0.0%
	best option	0	0	0	0	0.0%
	Overall Percent	0.0%	100.0%	0.0%	0.0%	66.7%

Dependent Variable: Democratic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.068	58.9%
Second discourse in text	.074	63.5%
Third discourse in text	.099	85.1%
CONTACT RESTRICTION	.116	100.0%
SANITATION AND HYGIENE	.104	89.5%
ISOLATION OF INFECTED	.086	74.1%
TOTAL ISOLATION	.070	60.2%
HEALTH CARE	.070	60.7%
VIRUS DISSEMINATION	.072	62.5%
LIFESTYLE CHANGES	.108	93.2%
RIGHTS AND FREEDOMS INFRINGEMENT	.044	38.4%
BUREAUCRATIC RESPONSE	.090	77.5%



*Multilayer Perceptron Network.

MLP STR_democratic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6 D7 D8 D9

```

/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005

```

```

    SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
    ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 17:12:19
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Science\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax

```
MLP STR_democratic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .
```

Resources	Processor Time	00:00:00.44
	Elapsed Time	00:00:00.43

Case Processing Summary

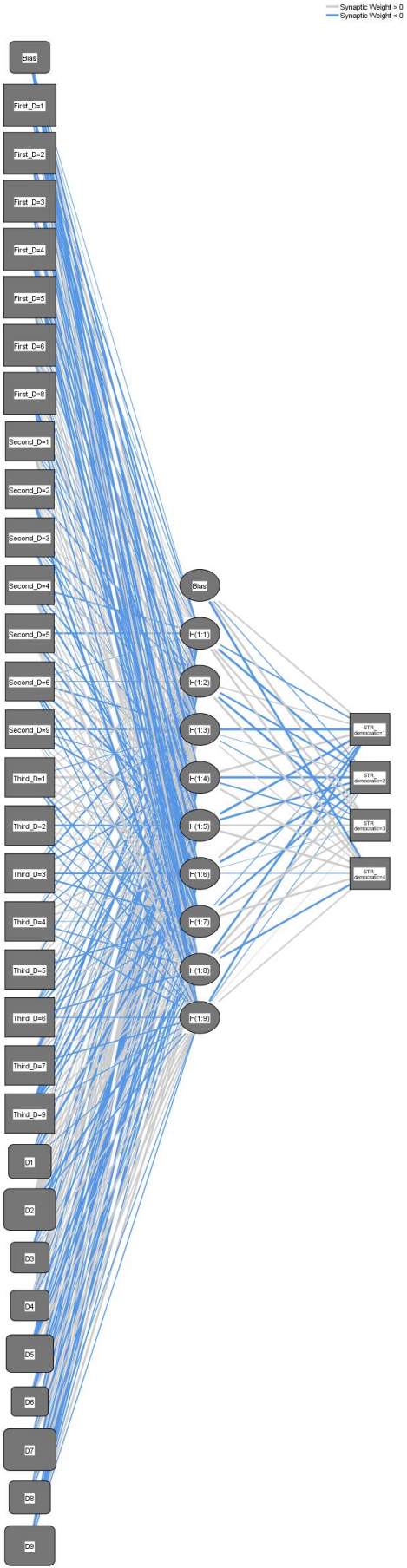
		N	Percent
Sample	Training	14	93.3%
	Testing	1	6.7%
Valid		15	100.0%
Excluded		89	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
8	RIGHTS AND FREEDOMS INFRINGEMENT		
9	BUREAUCRATIC RESPONSE		
Number of Units ^a		31	
Rescaling Method for Covariates		Standardized	
Hidden Layer(s)	Number of Hidden Layers	1	
	Number of Units in Hidden Layer 1 ^a	9	

	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Democratic strategy
	Number of Units		4
	Activation Function		Softmax
	Error Function		Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent
 Output layer activation function: Softmax

[Second_D=6	-.105	-.097	-.752	1.289	-1.041	.298	-.639	-.241	-.272				
]													
[Second_D=9	.049	.340	-.619	-.154	-.494	-.032	.434	-.072	.153				
]													
[Third_D=1]	.100	.278	-.213	1.512	.102	1.027	.596	-.714	-.258				
[Third_D=2]	.667	-.094	-.258	.171	-.547	.151	-.186	-.182	-.286				
[Third_D=3]	.405	-.653	.150	-.593	.067	-.595	-.538	-.003	-.188				
[Third_D=4]	.246	-.368	.144	-.272	.631	.467	-.050	-.301	-.334				
[Third_D=5]	.027	-.371	.073	.372	.023	.610	-.512	.151	.020				
[Third_D=6]	-.037	-.474	-.152	-.183	-.474	-.066	-.224	-.458	-.241				
[Third_D=7]	.571	-.320	-.625	.457	.821	.516	.203	.223	-.343				
[Third_D=9]	-.952	-.661	-.112	-1.123	-.903	-.443	.346	.463	-.202				
D1	.467	-.270	.033	-.265	.015	-1.391	.467	.594	-.186				
D2	1.052	.104	.315	.764	1.055	.807	.882	-.866	-.293				
D3	-.039	-1.197	-.164	-.512	.517	-.109	.114	-.088	.499				
D4	-.380	.872	.762	.522	-.382	.315	.325	-.345	.249				
D5	-.637	-.042	.014	-.901	-.151	-.558	-.470	.248	.886				
D6	.286	1.141	-.819	.124	-.655	-.313	-.035	-.120	.821				
D7	-.290	-.432	.771	-.726	.279	.042	-.622	1.114	.259				
D8	-.594	-.515	.278	-.030	-.507	.357	-.470	.637	-.202				
D9	-.503	-.442	.303	-1.362	-1.228	-.584	-.262	1.038	-.234				
Hidden Layer	(Bias)									.540	-.178	1.236	-1.680
1	H(1:1)									-.447	-2.300	.822	1.184
	H(1:2)									.329	-.723	-1.348	1.859
	H(1:3)									-1.332	-.038	-.238	.233
	H(1:4)									1.619	-1.610	-.419	.824
	H(1:5)									-2.049	-.904	1.188	1.502
	H(1:6)									1.313	-1.881	-.019	-.074
	H(1:7)									-.143	-1.012	.646	.927
	H(1:8)									-1.444	1.981	.600	-.842
	H(1:9)									-1.041	-.120	.006	.459

Classification

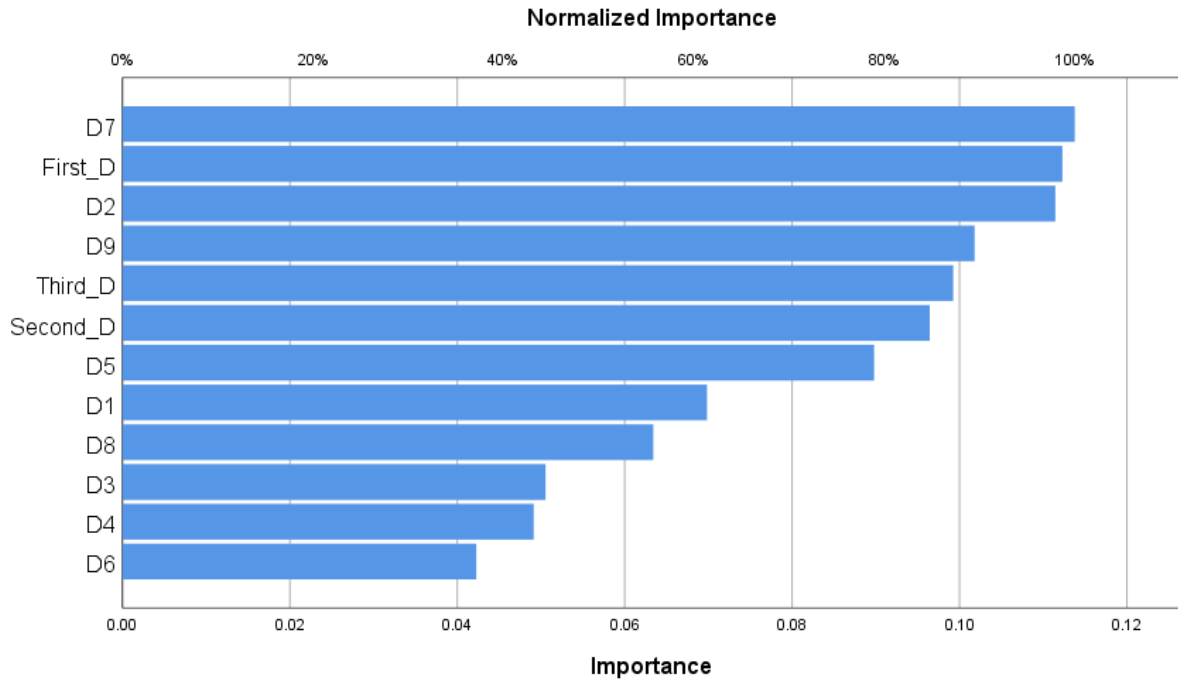
Sample	Observed	worst option	Predicted			Percent Correct
			mediocre option	good option	best option	
Training	worst option	4	0	0	0	100.0%
	mediocre option	0	5	0	0	100.0%
	good option	0	0	4	0	100.0%

	best option	0	0	0	1	100.0%
	Overall Percent	28.6%	35.7%	28.6%	7.1%	100.0%
Testing	worst option	1	0	0	0	100.0%
	mediocre option	0	0	0	0	0.0%
	good option	0	0	0	0	0.0%
	best option	0	0	0	0	0.0%
	Overall Percent	100.0%	0.0%	0.0%	0.0%	100.0%

Dependent Variable: Democratic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.112	98.7%
Second discourse in text	.096	84.8%
Third discourse in text	.099	87.2%
CONTACT RESTRICTION	.070	61.4%
SANITATION AND HYGIENE	.111	98.0%
ISOLATION OF INFECTED	.051	44.4%
TOTAL ISOLATION	.049	43.2%
HEALTH CARE	.090	78.9%
VIRUS DISSEMINATION	.042	37.2%
LIFESTYLE CHANGES	.114	100.0%
RIGHTS AND FREEDOMS INFRINGEMENT	.063	55.7%
BUREAUCRATIC RESPONSE	.102	89.5%



```

*Multilayer Perceptron Network.
MLP STR_democratic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5
D6 D7 D8 D9
/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created

13-DEC-2020 17:13:22

Comments

Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Siience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax

```
MLP STR_democratic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .
```

Resources	Processor Time	00:00:00.44
	Elapsed Time	00:00:00.42

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample.

These cases are excluded from the analysis.

Case Processing Summary

	N	Percent
Sample		
Training	10	83.3%
Testing	2	16.7%
Valid	12	100.0%
Excluded	92	
Total	104	

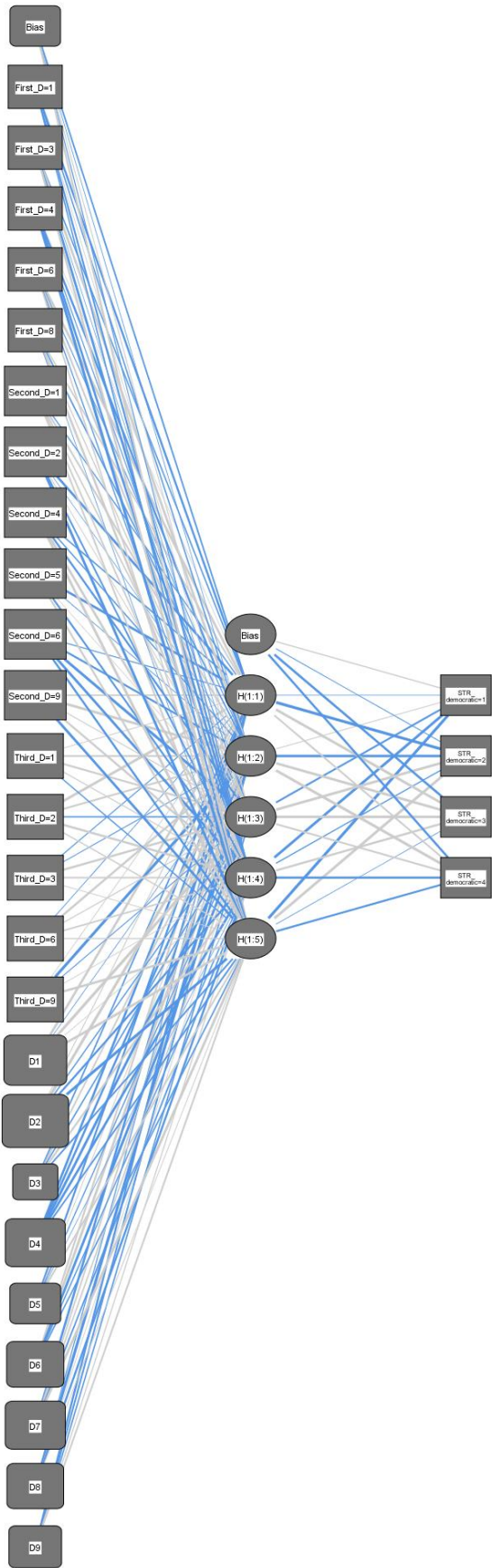
Network Information

Input Layer	Factors		
		1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

	9	BUREAUCRATIC RESPONSE
	Number of Units ^a	25
	Rescaling Method for Covariates	Standardized
Hidden Layer(s)	Number of Hidden Layers	1
	Number of Units in Hidden Layer 1 ^a	5
	Activation Function	Hyperbolic tangent
Output Layer	Dependent Variables	1
		Democratic strategy
	Number of Units	4
	Activation Function	Softmax
	Error Function	Cross-entropy

a. Excluding the bias unit

— Synaptic Weight > 0
— Synaptic Weight < 0



Hidden layer activation function: Hyperbolic tangent
Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	2.270
	Percent Incorrect Predictions	10.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error ^a
	Training Time	0:00:00.02
Testing	Cross Entropy Error	.524
	Percent Incorrect Predictions	0.0%

Dependent Variable: Democratic strategy

a. Error computations are based on the testing sample.

Parameter Estimates

Predictor	Hidden Layer 1					Output Layer			
	H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	[STR_demo cratic=1]	[STR_demo cratic=2]	[STR_demo cratic=3]	[STR_demo cratic=4]
Input Layer									
(Bias)	-.301	-.038	.106	-.129	.466				
[First_D=1]	-.510	-.252	.034	-.399	-.232				
[First_D=3]	-.249	.636	-.024	-.633	.546				
[First_D=4]	.026	-.524	-.126	-.576	-.938				
[First_D=6]	.631	-.115	.370	-.161	.264				
[First_D=8]	.282	-.269	.171	.616	-.044				
[Second_D=1]	-.189	.400	.272	.312	.366				
[Second_D=2]	-.638	-.010	.081	-.334	-.808				
[Second_D=4]	-.263	-.220	-.503	.639	.834				
[Second_D=5]	-.677	-.058	.034	-.455	.457				
[Second_D=6]	-.143	-.473	-.869	-.790	-.524				
[Second_D=9]	.283	.817	.130	.540	-.756				
[Third_D=1]	.089	.425	.465	.149	-.218				

[Third_D=2]	.847	.451	-.274	.584	.229				
[Third_D=3]	-.139	-.119	.577	.307	.063				
[Third_D=6]	-.060	.580	.148	.297	.176				
[Third_D=9]	.055	-1.077	-.124	.047	.665				
D1	.650	-.044	1.206	.051	.749				
D2	.121	1.008	-.193	-.503	-.912				
D3	-.281	.321	-.261	.502	-.339				
D4	-.625	-.545	-.797	-.656	-.323				
D5	-.455	.061	-.176	-.028	.366				
D6	.438	.716	-.773	-.204	-.265				
D7	-.622	.311	.278	-.290	.690				
D8	-.138	-1.014	.047	-.519	.068				
D9	-.508	-.366	-.253	.153	.382				
Hidden Layer	(Bias)					.217	-.096	-.637	-.615
1	H(1:1)					-.008	-1.146	.843	.387
	H(1:2)					.115	-.818	.826	.964
	H(1:3)					-.451	.822	.864	.436
	H(1:4)					-.845	-.191	.546	-.598
	H(1:5)					-1.215	.877	-.045	-.480

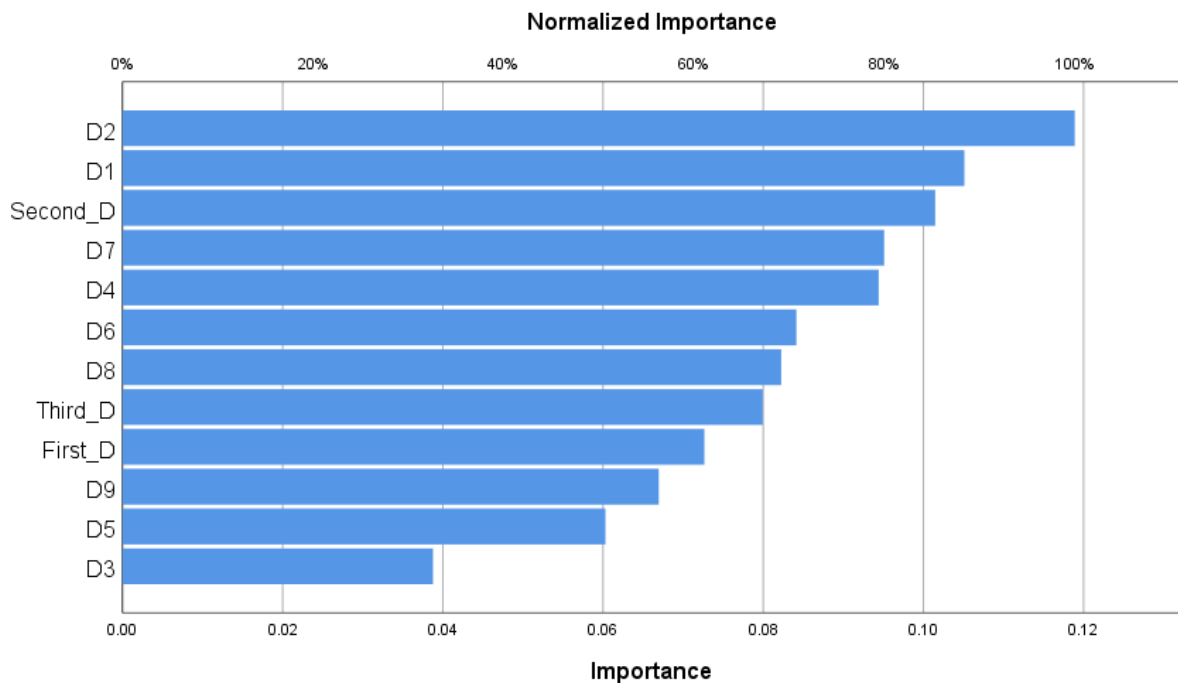
Classification

Sample	Observed	Predicted				Percent Correct
		worst option	mediocre option	good option	best option	
Training	worst option	3	0	0	0	100.0%
	mediocre option	0	4	0	0	100.0%
	good option	0	0	2	0	100.0%
	best option	1	0	0	0	0.0%
	Overall Percent	40.0%	40.0%	20.0%	0.0%	90.0%
Testing	worst option	1	0	0	0	100.0%
	mediocre option	0	1	0	0	100.0%
	good option	0	0	0	0	0.0%
	best option	0	0	0	0	0.0%
	Overall Percent	50.0%	50.0%	0.0%	0.0%	100.0%

Dependent Variable: Democratic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.073	61.1%
Second discourse in text	.101	85.3%
Third discourse in text	.080	67.2%
CONTACT RESTRICTION	.105	88.4%
SANITATION AND HYGIENE	.119	100.0%
ISOLATION OF INFECTED	.039	32.6%
TOTAL ISOLATION	.094	79.4%
HEALTH CARE	.060	50.7%
VIRUS DISSEMINATION	.084	70.8%
LIFESTYLE CHANGES	.095	80.0%
RIGHTS AND FREEDOMS INFRINGEMENT	.082	69.2%
BUREAUCRATIC RESPONSE	.067	56.3%



*Multilayer Perceptron Network.

MLP STR_democratic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6 D7 D8 D9

```

/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005

```

```

    SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
    ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 17:13:50
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Science\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax

```

MLP STR_democratic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .

```

Resources	Processor Time	00:00:00.41
	Elapsed Time	00:00:00.42

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample.

These cases are excluded from the analysis.

Case Processing Summary

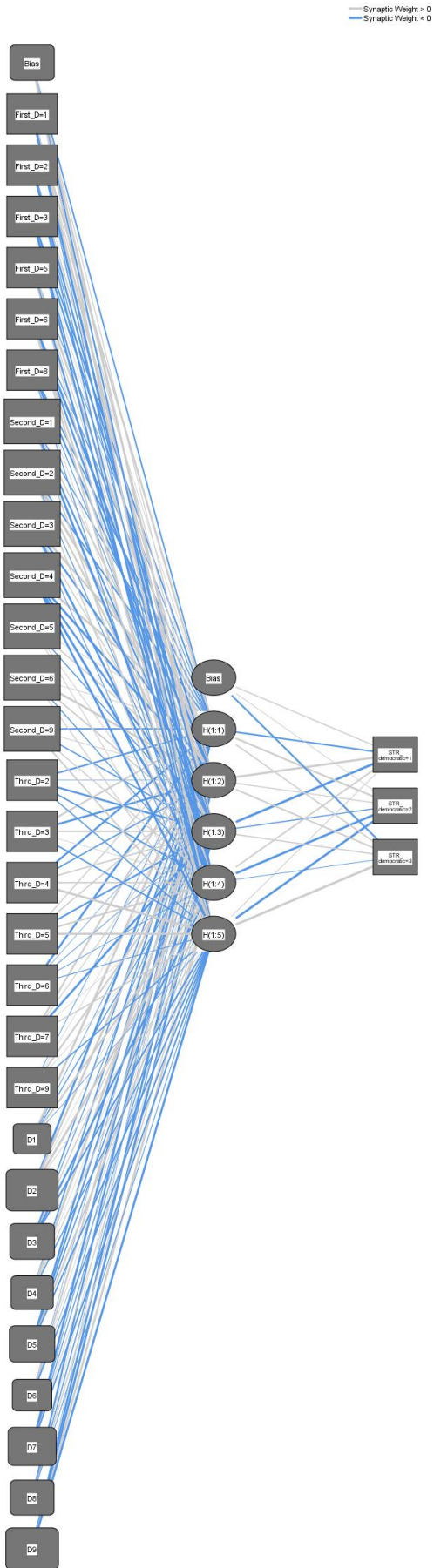
		N	Percent
Sample	Training	11	91.7%
	Testing	1	8.3%
Valid		12	100.0%
Excluded		92	
Total		104	

Network Information

Input Layer	Factors		
		1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

	9	BUREAUCRATIC RESPONSE
	Number of Units ^a	29
	Rescaling Method for Covariates	Standardized
Hidden Layer(s)	Number of Hidden Layers	1
	Number of Units in Hidden Layer 1 ^a	5
	Activation Function	Hyperbolic tangent
Output Layer	Dependent Variables	1
		Democratic strategy
	Number of Units	3
	Activation Function	Softmax
	Error Function	Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent
 Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	7.480
	Percent Incorrect Predictions	27.3%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error ^a
	Training Time	0:00:00.02
Testing	Cross Entropy Error	.641
	Percent Incorrect Predictions	0.0%

Dependent Variable: Democratic strategy

a. Error computations are based on the testing sample.

Parameter Estimates

Predictor	Hidden Layer 1					Predicted	Output Layer		
	H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	[STR_demo cratic=1]	[STR_demo cratic=2]	[STR_demo cratic=3]	
Input Layer (Bias)	-.256	.142	.784	-.300	.434				
[First_D=1]	.474	.150	.862	-.654	-.150				
[First_D=2]	.041	.222	-.391	-.161	-.282				
[First_D=3]	-.288	-.351	.044	-.263	-.398				
[First_D=5]	-.126	.544	.142	-.434	.191				
[First_D=6]	-.168	-.734	-.398	.387	.353				
[First_D=8]	-.234	-.383	-.134	.051	-.147				
[Second_D=1]	-.177	.243	-.306	-.641	.284				
[Second_D=2]	-.290	.977	.369	-.148	.206				
[Second_D=3]	.557	-.413	.164	-.478	-.119				
[Second_D=4]	.556	-.561	-.438	-.873	-.499				
[Second_D=5]	.061	.207	-.186	.099	.123				
[Second_D=6]	.079	.547	.258	-.170	.151				

[Second_D=9]	-.303	.104	-.215	.185	.294			
[Third_D=2]	-.304	-.029	-.419	-.253	-.202			
[Third_D=3]	.352	-.455	.320	.053	-.255			
[Third_D=4]	-.444	-.232	.240	.241	.676			
[Third_D=5]	.181	.210	-.304	.347	.493			
[Third_D=6]	-.454	-.038	-.102	-.102	-.137			
[Third_D=7]	.368	.139	-.512	.028	.217			
[Third_D=9]	-.071	.014	.349	.046	-.210			
D1	.578	-.069	-.173	.419	-.065			
D2	-.527	.492	.011	.735	.093			
D3	-.207	-.131	.200	-.431	-.297			
D4	-.258	.591	.014	.153	-.200			
D5	-.449	-.304	-.202	.328	-.269			
D6	-.036	.411	.044	-.020	-.219			
D7	-.490	-.105	-.150	.126	-.281			
D8	-.371	.049	-.180	.198	-.107			
D9	-.005	-.439	-.520	.489	-.512			
Hidden Layer 1 (Bias)						.189	.066	-.361
H(1:1)						-.299	.395	.210
H(1:2)						.516	.159	.291
H(1:3)						-.915	-.181	.203
H(1:4)						.267	-.656	-.066
H(1:5)						.113	-.610	1.136

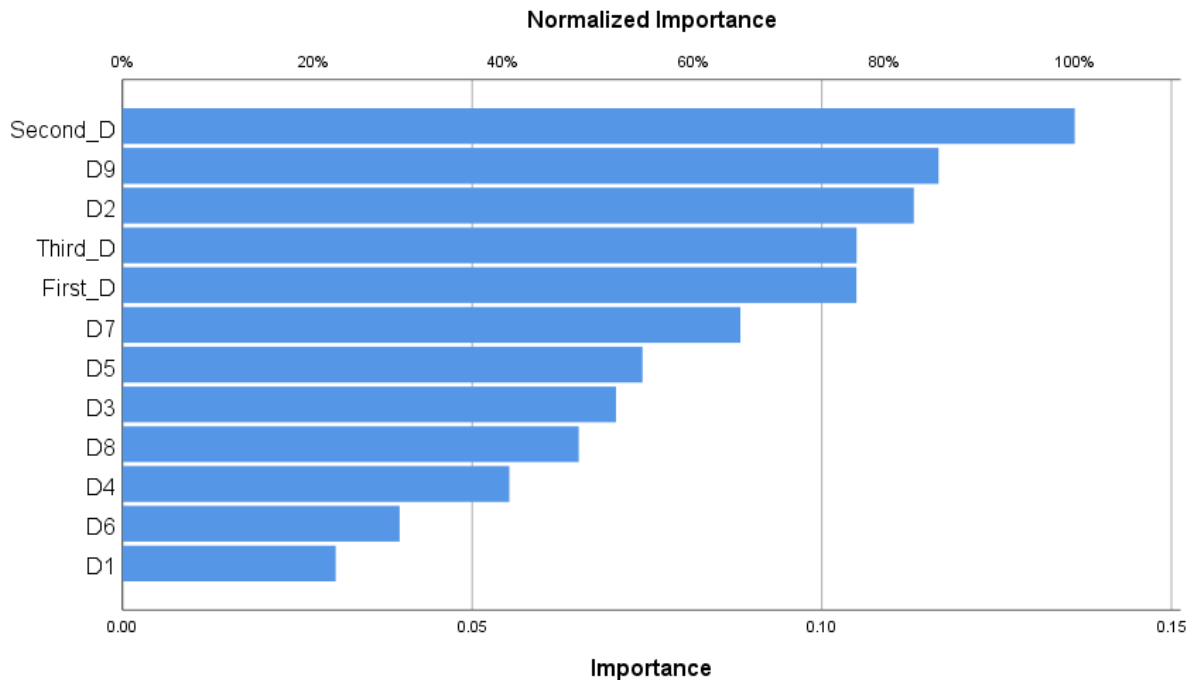
Classification

Sample	Observed	Predicted			Percent Correct
		worst option	mediocre option	good option	
Training	worst option	1	1	1	33.3%
	mediocre option	0	4	1	80.0%
	good option	0	0	3	100.0%
	Overall Percent	9.1%	45.5%	45.5%	72.7%
Testing	worst option	0	0	0	0.0%
	mediocre option	0	0	0	0.0%
	good option	0	0	1	100.0%
	Overall Percent	0.0%	0.0%	100.0%	100.0%

Dependent Variable: Democratic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.105	77.1%
Second discourse in text	.136	100.0%
Third discourse in text	.105	77.1%
CONTACT RESTRICTION	.030	22.4%
SANITATION AND HYGIENE	.113	83.1%
ISOLATION OF INFECTED	.071	51.8%
TOTAL ISOLATION	.055	40.6%
HEALTH CARE	.074	54.6%
VIRUS DISSEMINATION	.040	29.1%
LIFESTYLE CHANGES	.088	64.9%
RIGHTS AND FREEDOMS INFRINGEMENT	.065	47.9%
BUREAUCRATIC RESPONSE	.117	85.7%



*Multilayer Perceptron Network.

```
MLP STR_democratic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5
D6 D7 D8 D9
```

```
/RESCALE COVARIATE=STANDARDIZED
```

```
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
```

```
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
```

```

/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005
  SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
  ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 17:13:57
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\MyDocs\Science\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax

```
MLP STR_democratic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .
```

Resources	Processor Time	00:00:00.42
	Elapsed Time	00:00:00.46

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample.

These cases are excluded from the analysis.

Case Processing Summary

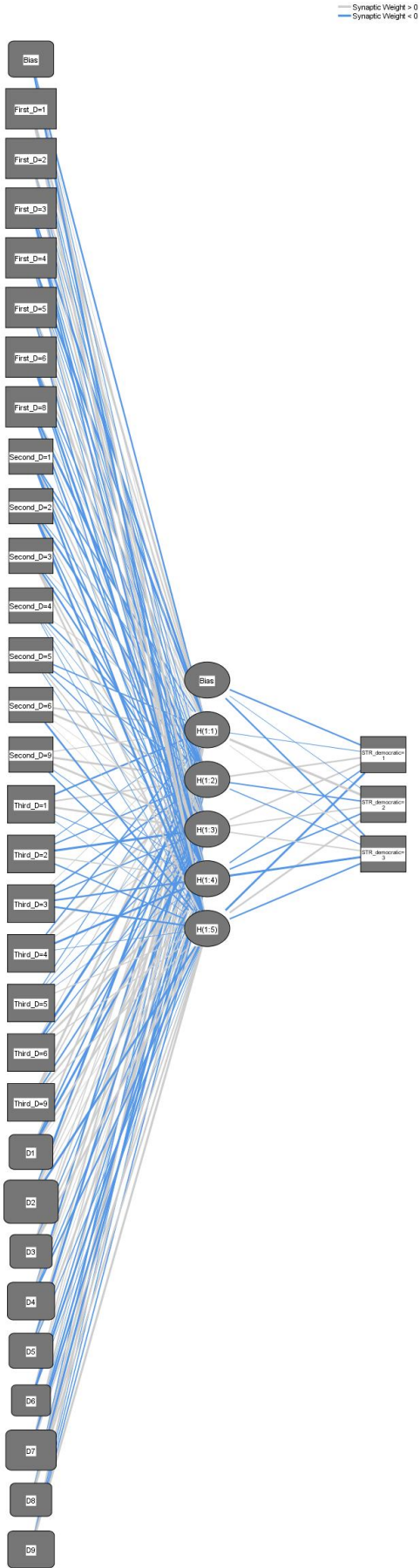
	N	Percent
Sample		
Training	12	92.3%
Testing	1	7.7%
Valid	13	100.0%
Excluded	91	
Total	104	

Network Information

Input Layer	Factors		
		1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

	9	BUREAUCRATIC RESPONSE
	Number of Units ^a	30
	Rescaling Method for Covariates	Standardized
Hidden Layer(s)	Number of Hidden Layers	1
	Number of Units in Hidden Layer 1 ^a	5
	Activation Function	Hyperbolic tangent
Output Layer	Dependent Variables	1
		Democratic strategy
	Number of Units	3
	Activation Function	Softmax
	Error Function	Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent
 Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	7.566
	Percent Incorrect Predictions	25.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error ^a
	Training Time	0:00:00.03
Testing	Cross Entropy Error	.258
	Percent Incorrect Predictions	0.0%

Dependent Variable: Democratic strategy

a. Error computations are based on the testing sample.

Parameter Estimates

Predictor	Hidden Layer 1					Output Layer		
	H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	[STR_demo cratic=1]	[STR_demo cratic=2]	[STR_demo cratic=3]
Input Layer (Bias)	-.448	.051	-.166	.753	-.736			
[First_D=1]	.818	.009	-.183	-.225	.822			
[First_D=2]	.369	-.194	.383	-.214	.395			
[First_D=3]	-.941	.176	-.195	-.433	-.464			
[First_D=4]	-1.192	-.203	-.079	.559	-.198			
[First_D=5]	.236	-.150	.275	.615	-.374			
[First_D=6]	.446	-.351	-.166	-.855	-.276			
[First_D=8]	.105	-1.032	.128	-.444	-.066			
[Second_D=1]	-.379	-.415	.461	-.361	-.640			
[Second_D=2]	-.098	-.589	.270	-.297	-.975			
[Second_D=3]	.078	-.198	-.475	.441	.562			
[Second_D=4]	.171	-.380	-.030	-.055	-.079			
[Second_D=5]	-.321	-.272	-.274	.292	-.116			

[Second_D=6]	.476	.674	.051	.009	-.489			
[Second_D=9]	.202	.629	.676	-.108	-.365			
[Third_D=1]	-.475	.421	.619	-.131	-.053			
[Third_D=2]	-.129	-.314	-.864	.294	-.358			
[Third_D=3]	.069	-.418	-.348	-.462	-.552			
[Third_D=4]	-.357	.899	.176	-.744	-.070			
[Third_D=5]	-.184	.000	-.206	-.020	.205			
[Third_D=6]	.202	-1.318	-.223	.801	.234			
[Third_D=9]	.968	.302	-.399	.541	.226			
D1	.511	-.395	-.872	.532	.001			
D2	-.983	.623	.195	.135	-.834			
D3	.177	.389	-.267	.405	.628			
D4	-.517	.665	.073	-.255	-.450			
D5	.487	-.884	.063	.579	-.202			
D6	.289	.148	-.346	-.594	-.055			
D7	.503	-.026	-.484	-.549	.366			
D8	-.273	.801	-.801	.587	.484			
D9	.625	-.163	-.224	-.301	.820			
Hidden Layer 1 (Bias)						-.416	-.069	-.434
H(1:1)						-.092	1.489	.070
H(1:2)						.456	-.357	-.211
H(1:3)						.429	.345	.297
H(1:4)						-.289	-.390	-.805
H(1:5)						-.729	.525	-.401

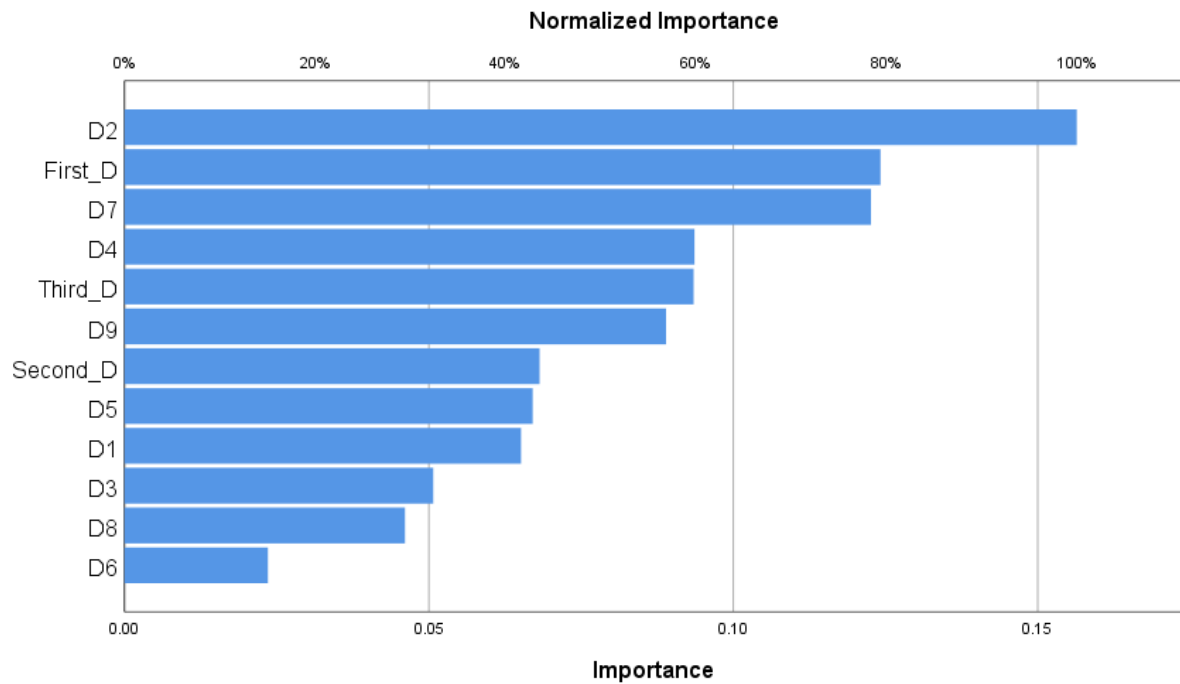
Classification

Sample	Observed	Predicted			Percent Correct
		worst option	mediocre option	good option	
Training	worst option	4	0	0	100.0%
	mediocre option	0	5	0	100.0%
	good option	2	1	0	0.0%
	Overall Percent	50.0%	50.0%	0.0%	75.0%
Testing	worst option	1	0	0	100.0%
	mediocre option	0	0	0	0.0%
	good option	0	0	0	0.0%
	Overall Percent	100.0%	0.0%	0.0%	100.0%

Dependent Variable: Democratic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.124	79.4%
Second discourse in text	.068	43.6%
Third discourse in text	.093	59.8%
CONTACT RESTRICTION	.065	41.7%
SANITATION AND HYGIENE	.156	100.0%
ISOLATION OF INFECTED	.051	32.4%
TOTAL ISOLATION	.094	59.9%
HEALTH CARE	.067	42.9%
VIRUS DISSEMINATION	.024	15.1%
LIFESTYLE CHANGES	.123	78.4%
RIGHTS AND FREEDOMS INFRINGEMENT	.046	29.5%
BUREAUCRATIC RESPONSE	.089	56.9%



*Multilayer Perceptron Network.

MLP STR_democratic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6 D7 D8 D9

```

/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.000005
SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 17:14:03
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\MyDocs\Science\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
	Missing Value Handling	Definition of Missing
Cases Used		Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax

```
MLP STR_democratic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .
```

Resources

Processor Time

00:00:00.39

Elapsed Time

00:00:00.43

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample.

These cases are excluded from the analysis.

The following independent variables are constant in the training sample and are excluded from the analysis: D7, D8.

Case Processing Summary

		N	Percent
Sample	Training	6	85.7%
	Testing	1	14.3%
Valid		7	100.0%
Excluded		97	
Total		104	

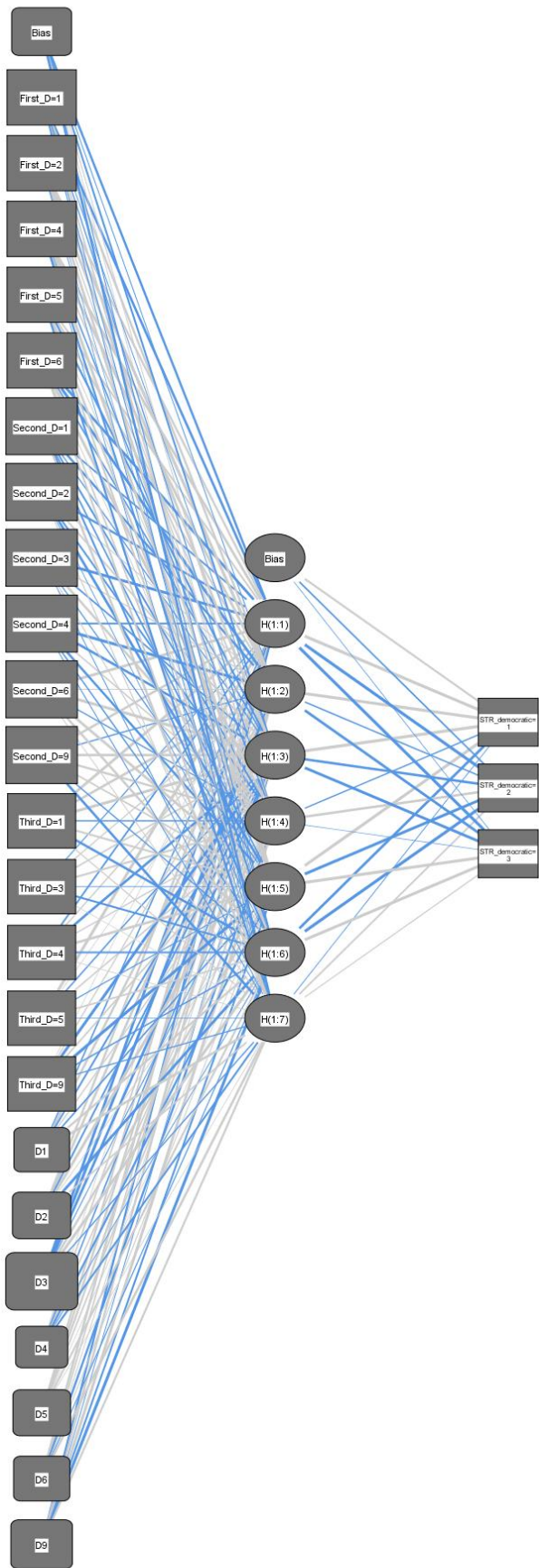
Network Information

Input Layer	Factors		
	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
	5	HEALTH CARE	
	6	VIRUS DISSEMINATION	
	7	BUREAUCRATIC RESPONSE	
	Number of Units ^a		23
	Rescaling Method for Covariates		Standardized

Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1 ^a		7
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Democratic strategy
	Number of Units		3
	Activation Function		Softmax
	Error Function		Cross-entropy

a. Excluding the bias unit

— Synaptic Weight > 0
— Synaptic Weight < 0



Hidden layer activation function: Hyperbolic tangent
Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	.128
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error ^a
	Training Time	0:00:00.00
Testing	Cross Entropy Error	.034
	Percent Incorrect Predictions	0.0%

Dependent Variable: Democratic strategy

a. Error computations are based on the testing sample.

Parameter Estimates

Predictor	Hidden Layer 1								Output Layer		
	H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	H(1:6)	H(1:7)	[STR_democr atic=1]	[STR_democr atic=2]	[STR_democr atic=3]	
Input Layer											
(Bias)	-.427	-.072	-.300	.075	.042	-.112	-.450				
[First_D=1]	-.466	.383	-.070	-.147	.253	-.102	-.106				
[First_D=2]	.339	.728	.526	.126	.486	-.010	-.065				
[First_D=4]	.513	.537	.251	-.212	.553	-.330	-.050				
[First_D=5]	.284	.302	-.331	.060	.422	.317	-.349				
[First_D=6]	-.531	-.581	-.229	.597	.064	.259	.320				
[Second_D=1]	-.263	-.395	-.144	-.293	-.237	-.317	.428				
[Second_D=2]	-.389	.098	.272	-.298	-.510	-.063	.113				
[Second_D=3]	-.581	.141	-.257	.436	-.144	.110	-.078				
[Second_D=4]	-.280	-.634	-.468	.220	-.431	-.194	-.100				
[Second_D=6]	.579	.097	.743	-.159	.534	.451	.087				
[Second_D=9]	.448	-.185	.522	.367	.255	-.170	-.484				
[Third_D=1]	.587	.506	.698	-.196	.319	-.460	.142				
[Third_D=3]	-.123	.149	.238	.329	-.056	-.310	.004				
[Third_D=4]	-.269	.198	-.480	.174	.527	-.315	.042				
[Third_D=5]	.701	.031	-.209	.229	-.116	.267	-.051				
[Third_D=9]	.008	.149	-.613	.257	-.737	-.202	-.145				
D1	-.203	.438	-.286	.185	-.224	.382	.510				
D2	.406	.468	-.280	.603	.060	-.569	.248				

	D3	-.540	-.669	-.506	-.099	.428	.614	-.168			
	D4	.011	.242	-.222	.196	-.336	-.072	-.317			
	D5	.347	.385	.366	.240	.022	.324	.017			
	D6	.473	.223	.066	-.361	.088	-.120	.452			
	D9	-.356	.369	-.067	.578	-.307	-.658	.345			
Hidden Layer 1	(Bias)								.348	-.246	-.037
	H(1:1)								1.852	-.966	-.908
	H(1:2)								.923	-.197	-.543
	H(1:3)								1.437	-.476	-.607
	H(1:4)								-.188	.506	-.010
	H(1:5)								.912	-.624	.895
	H(1:6)								-.531	-1.264	.801
	H(1:7)								-.069	.277	.132

Classification

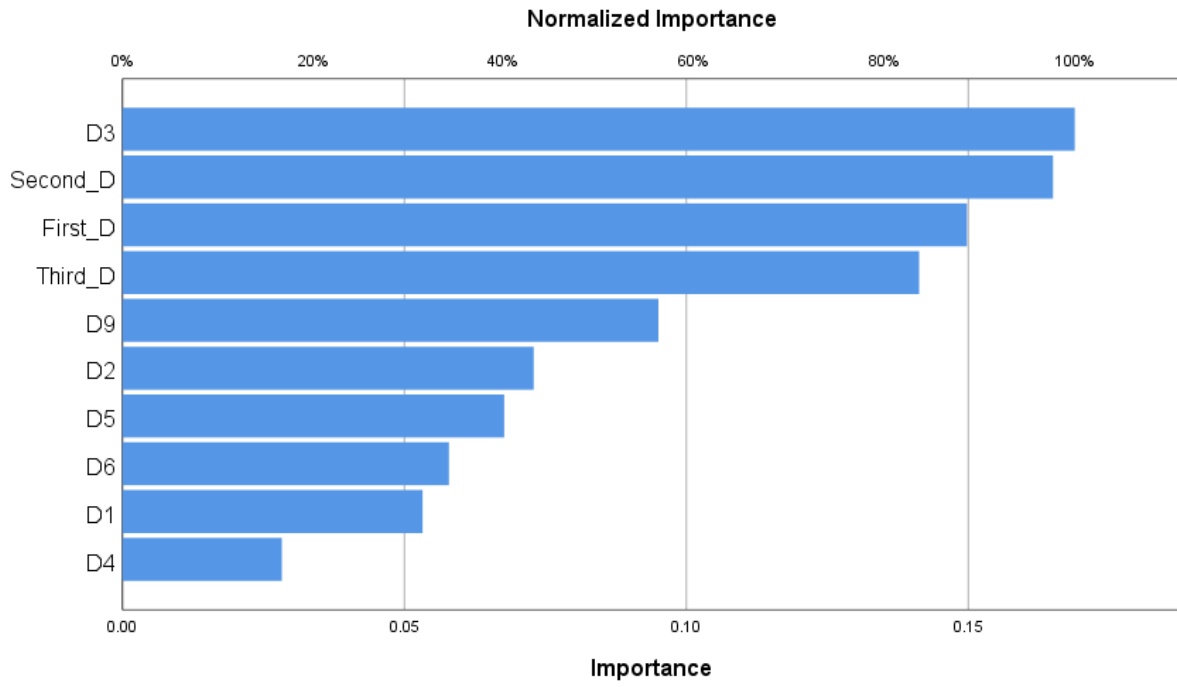
Sample	Observed	Predicted			Percent Correct
		worst option	mediocre option	good option	
Training	worst option	2	0	0	100.0%
	mediocre option	0	2	0	100.0%
	good option	0	0	2	100.0%
	Overall Percent	33.3%	33.3%	33.3%	100.0%
Testing	worst option	1	0	0	100.0%
	mediocre option	0	0	0	0.0%
	good option	0	0	0	0.0%
	Overall Percent	100.0%	0.0%	0.0%	100.0%

Dependent Variable: Democratic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.150	88.7%
Second discourse in text	.165	97.7%
Third discourse in text	.141	83.7%
CONTACT RESTRICTION	.053	31.5%
SANITATION AND HYGIENE	.073	43.2%
ISOLATION OF INFECTED	.169	100.0%
TOTAL ISOLATION	.028	16.7%

HEALTH CARE	.068	40.1%
VIRUS DISSEMINATION	.058	34.3%
BUREAUCRATIC RESPONSE	.095	56.3%



```

*Multilayer Perceptron Network.
MLP STR_democratic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5
D6 D7 D8 D9
/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 17:15:06
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\MyDocs\Science\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax

```
MLP STR_democratic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .
```

Resources	Processor Time	00:00:00.42
	Elapsed Time	00:00:00.44

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample.

These cases are excluded from the analysis.

The following independent variables are constant in the training sample and are excluded from the analysis: D7, D8.

Case Processing Summary

	N	Percent
Sample		
Training	10	90.9%
Testing	1	9.1%
Valid	11	100.0%
Excluded	93	
Total	104	

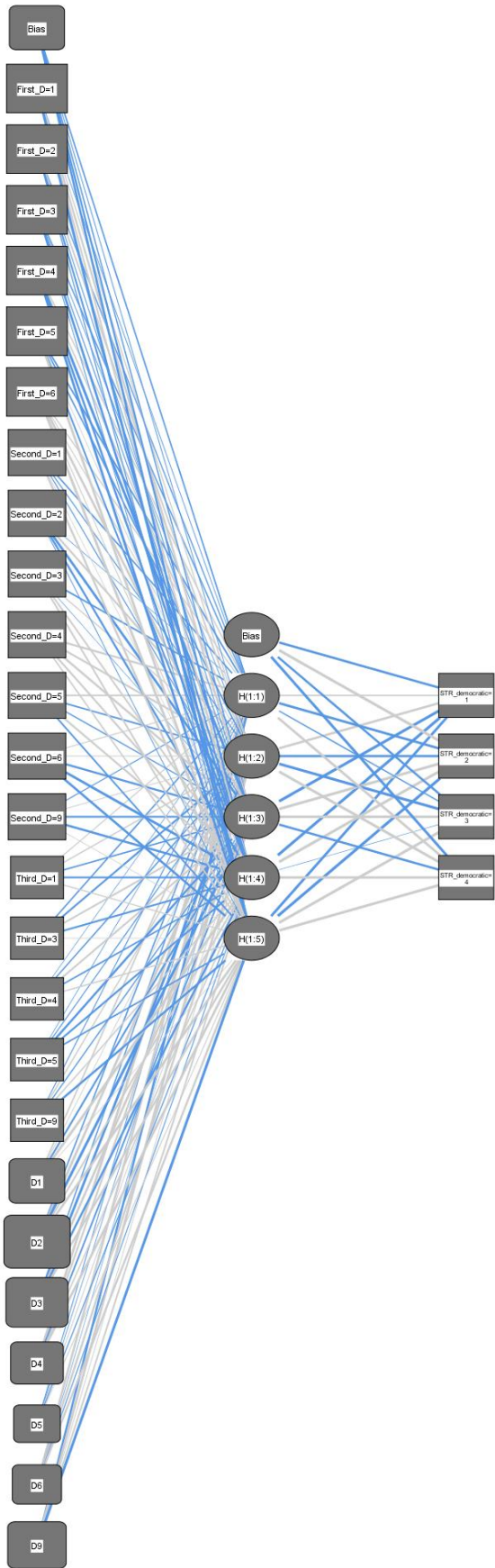
Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	BUREAUCRATIC RESPONSE
	Number of Units ^a	25	
	Rescaling Method for Covariates	Standardized	

Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1 ^a		5
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Democratic strategy
	Number of Units		4
	Activation Function		Softmax
	Error Function		Cross-entropy

a. Excluding the bias unit

— Synaptic Weight > 0
— Synaptic Weight < 0



Hidden layer activation function: Hyperbolic tangent
Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	.006
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	Training error ratio criterion (.001) achieved
	Training Time	0:00:00.03
Testing	Cross Entropy Error	.000
	Percent Incorrect Predictions	0.0%

Dependent Variable: Democratic strategy

Parameter Estimates

Predictor	Hidden Layer 1					Predicted	Output Layer			
	H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	[STR_demo cratic=1]	[STR_demo cratic=2]	[STR_demo cratic=3]	[STR_demo cratic=4]	
Input Layer										
(Bias)	-.405	-.119	-.312	-.597	-.871					
[First_D=1]	-.086	.246	.692	.486	-1.352					
[First_D=2]	-.246	.451	-.160	-.488	-.231					
[First_D=3]	-.312	-.070	-.195	-.914	-.109					
[First_D=4]	.293	.412	-1.218	-.777	-1.090					
[First_D=5]	-.442	-.375	.065	-.476	1.096					
[First_D=6]	.267	.175	.911	.177	1.240					
[Second_D=1]	-.405	-.219	-.214	.031	.700					
[Second_D=2]	-.033	.646	-1.025	-.676	-.102					
[Second_D=3]	-.456	.267	-.019	.501	.509					
[Second_D=4]	.649	.600	.831	.610	.437					
[Second_D=5]	.467	-.454	-.288	.649	-.475					
[Second_D=6]	.212	.086	-.708	-1.218	-1.003					
[Second_D=9]	-.231	.152	-.549	-.865	.047					

	[Third_D=1]	.239	.357	-.423	-.513	.251				
	[Third_D=3]	-.394	-.562	.547	-.519	.042				
	[Third_D=4]	-.022	-.336	.552	-.443	.345				
	[Third_D=5]	-.044	-.229	-.831	-.591	-.449				
	[Third_D=9]	-.208	.322	-.267	.382	-.819				
	D1	.448	.076	-.523	1.260	.041				
	D2	-.367	1.080	-2.046	.500	1.054				
	D3	-.304	-1.132	.967	-.789	.756				
	D4	1.187	.523	-.462	.359	1.062				
	D5	-.164	-.061	.092	-.242	.160				
	D6	.940	-.010	.710	-.195	.716				
	D9	-.780	1.170	.081	.467	-1.613				
Hidden Layer	(Bias)						-1.016	2.786	-.885	-1.620
1	H(1:1)						.430	-1.115	-.334	1.169
	H(1:2)						1.026	-.947	-2.382	2.214
	H(1:3)						-3.672	2.406	1.933	-.890
	H(1:4)						-3.954	3.324	-.006	1.561
	H(1:5)						-1.527	-4.184	3.045	2.367

Classification

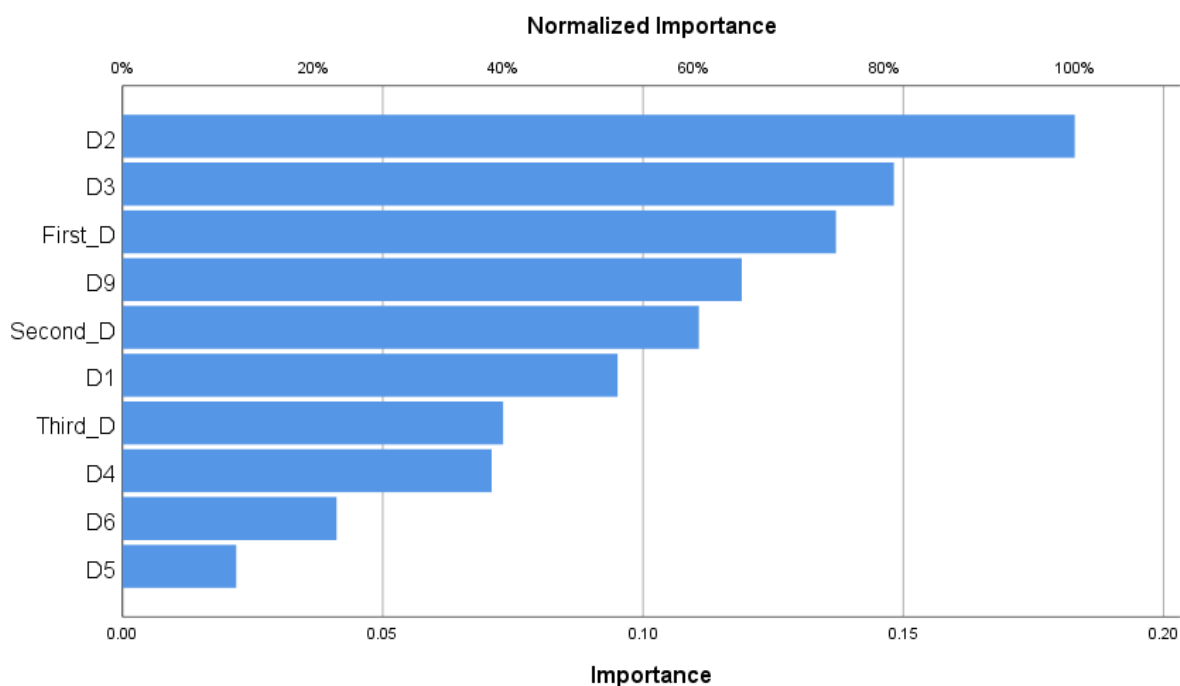
Sample	Observed	Predicted				Percent Correct
		worst option	mediocre option	good option	best option	
Training	worst option	3	0	0	0	100.0%
	mediocre option	0	4	0	0	100.0%
	good option	0	0	2	0	100.0%
	best option	0	0	0	1	100.0%
	Overall Percent	30.0%	40.0%	20.0%	10.0%	100.0%
Testing	worst option	1	0	0	0	100.0%
	mediocre option	0	0	0	0	0.0%
	good option	0	0	0	0	0.0%
	best option	0	0	0	0	0.0%
	Overall Percent	100.0%	0.0%	0.0%	0.0%	100.0%

Dependent Variable: Democratic strategy

Independent Variable Importance

Importance	Normalized Importance

First discourse in text	.137	74.9%
Second discourse in text	.111	60.5%
Third discourse in text	.073	40.0%
CONTACT RESTRICTION	.095	52.0%
SANITATION AND HYGIENE	.183	100.0%
ISOLATION OF INFECTED	.148	81.0%
TOTAL ISOLATION	.071	38.8%
HEALTH CARE	.022	11.9%
VIRUS DISSEMINATION	.041	22.5%
BUREAUCRATIC RESPONSE	.119	65.0%



```

*Multilayer Perceptron Network.
MLP STR_democratic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5
D6 D7 D8 D9
/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 17:15:12
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Science\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax

```
MLP STR_democratic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .
```

Resources	Processor Time	00:00:00.44
	Elapsed Time	00:00:00.46

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample.

These cases are excluded from the analysis.

The following independent variables are constant in the training sample and are excluded from the analysis: D7.

Case Processing Summary

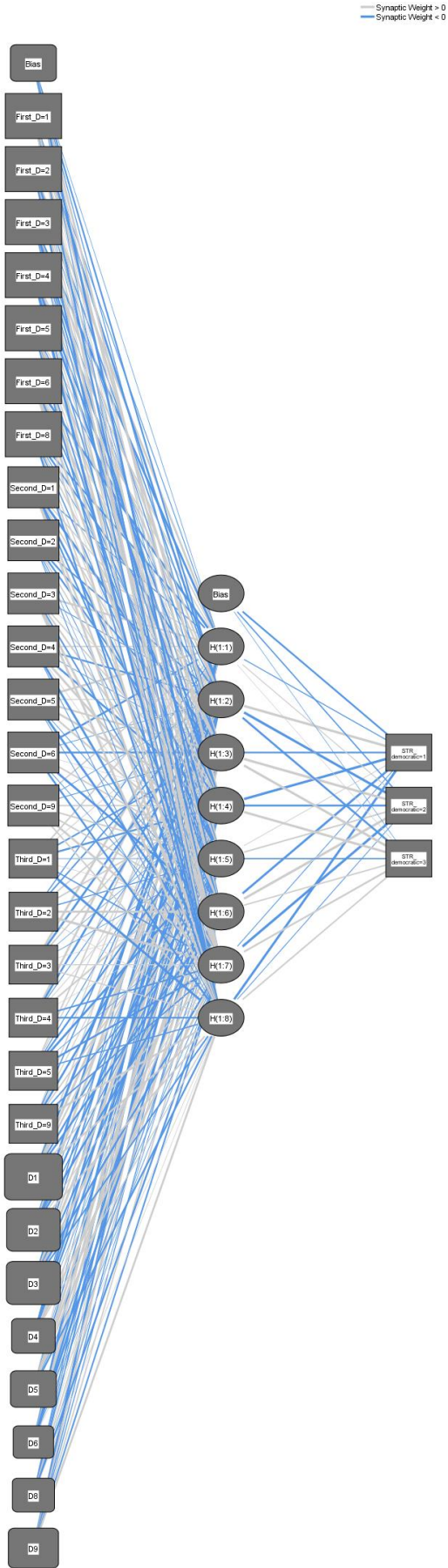
	N	Percent
Sample		
Training	10	83.3%
Testing	2	16.7%
Valid	12	100.0%
Excluded	92	
Total	104	

Network Information

Input Layer	Factors		
		1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	RIGHTS AND FREEDOMS INFRINGEMENT

	8	BUREAUCRATIC RESPONSE
	Number of Units ^a	28
	Rescaling Method for Covariates	Standardized
Hidden Layer(s)	Number of Hidden Layers	1
	Number of Units in Hidden Layer 1 ^a	8
	Activation Function	Hyperbolic tangent
Output Layer	Dependent Variables	1
		Democratic strategy
	Number of Units	3
	Activation Function	Softmax
	Error Function	Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent
 Output layer activation function: Softmax

[Second_D=6	-0.475	-0.085	-0.463	0.017	0.309	-0.597	-0.117	-0.460			
]											
[Second_D=9	0.258	-0.057	-0.138	0.309	0.342	0.340	0.563	0.309			
]											
[Third_D=1]	0.303	0.095	-0.349	-0.413	-0.060	0.017	-0.254	-0.825			
[Third_D=2]	-0.206	-0.318	0.287	0.318	-0.204	0.572	0.889	0.053			
[Third_D=3]	0.620	-0.519	0.317	-0.053	-0.072	0.038	0.173	0.226			
[Third_D=4]	0.525	-0.510	-0.136	0.105	0.378	0.018	-0.351	-0.351			
[Third_D=5]	0.308	0.167	-0.145	-0.406	-0.558	-0.052	-0.439	-0.240			
[Third_D=9]	0.191	-0.243	0.137	-0.493	0.267	-0.264	-0.294	0.495			
D1	0.235	-1.009	0.828	0.399	-0.381	-0.448	0.268	0.466			
D2	-0.598	0.754	-0.114	-0.480	-0.232	-0.516	0.143	0.359			
D3	-0.221	-0.297	0.328	0.887	-0.379	0.870	-0.468	-0.346			
D4	-0.141	-0.500	-0.501	-0.376	-0.025	0.273	0.649	0.195			
D5	0.187	-0.067	-0.250	0.820	0.759	0.523	-0.099	-0.384			
D6	-0.643	0.218	0.538	-0.554	-0.604	-0.193	-0.051	0.048			
D8	-0.237	-0.133	-0.351	0.042	0.295	-0.056	-0.405	0.029			
D9	0.112	-0.650	0.370	-0.209	-0.160	0.262	-0.325	0.476			
Hidden Layer	(Bias)								-0.416	-0.249	-0.023
1	H(1:1)								-0.192	0.166	0.006
	H(1:2)								0.897	-1.001	-0.501
	H(1:3)								-0.349	1.279	0.837
	H(1:4)								-0.961	-0.479	0.786
	H(1:5)								0.080	0.328	-0.260
	H(1:6)								-0.617	0.959	0.290
	H(1:7)								-0.132	-1.185	0.425
	H(1:8)								-0.743	-0.124	0.335

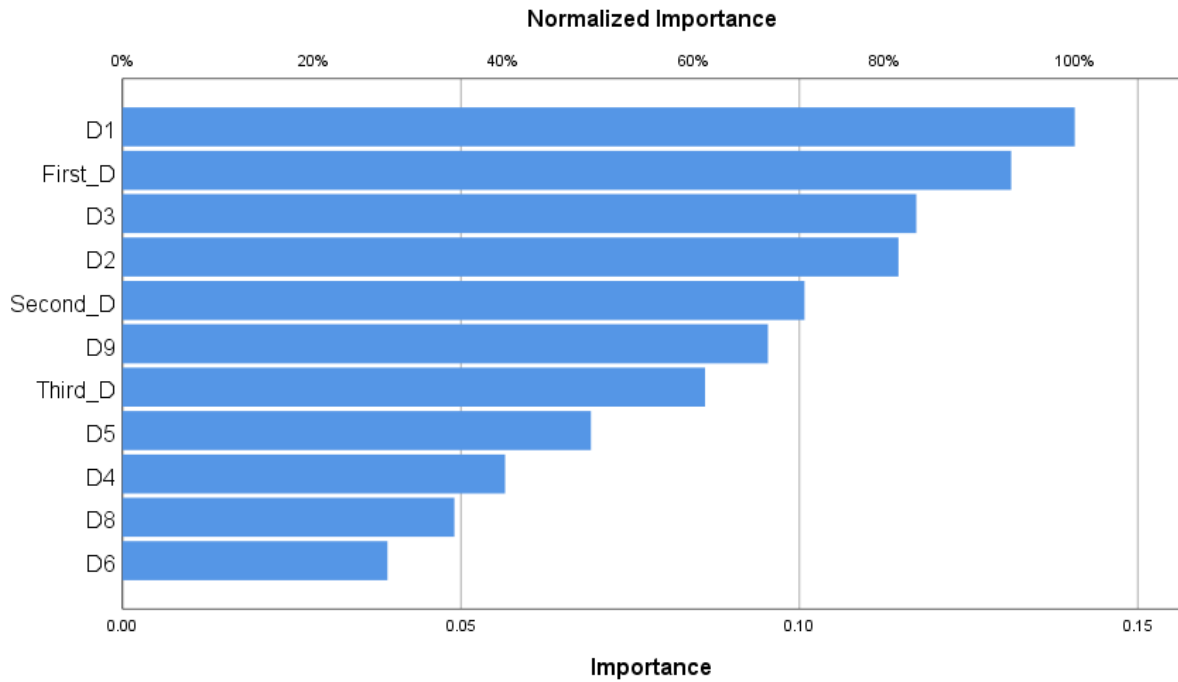
Classification

Sample	Observed	Predicted			Percent Correct
		worst option	mediocre option	good option	
Training	worst option	4	0	0	100.0%
	mediocre option	0	3	0	100.0%
	good option	0	0	3	100.0%
	Overall Percent	40.0%	30.0%	30.0%	100.0%
Testing	worst option	1	0	0	100.0%
	mediocre option	0	1	0	100.0%
	good option	0	0	0	0.0%
	Overall Percent	50.0%	50.0%	0.0%	100.0%

Dependent Variable: Democratic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.131	93.3%
Second discourse in text	.101	71.6%
Third discourse in text	.086	61.2%
CONTACT RESTRICTION	.141	100.0%
SANITATION AND HYGIENE	.115	81.5%
ISOLATION OF INFECTED	.117	83.4%
TOTAL ISOLATION	.057	40.2%
HEALTH CARE	.069	49.2%
VIRUS DISSEMINATION	.039	27.8%
RIGHTS AND FREEDOMS INFRINGEMENT	.049	34.9%
BUREAUCRATIC RESPONSE	.095	67.8%



*Multilayer Perceptron Network.

MLP STR_democratic (MLEVEL=0) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6 D7 D8 D9

```

/RESCALE COVARIATE=STANDARDIZED
/PARTITION TRAINING=7 TESTING=3 HOLDOUT=0
/ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
/CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.000005
SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
/PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
/MISSING USERMISSING=EXCLUDE .

```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 17:15:17
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\MyDocs\Science\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
	Missing Value Handling	Definition of Missing
Cases Used		Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax

```
MLP STR_democratic
(MLEVEL=0) BY First_D
Second_D Third_D WITH D1
D2 D3 D4 D5 D6 D7 D8 D9
/RESCALE
COVARIATE=STANDARDIZ
ED
/PARTITION
TRAINING=7 TESTING=3
HOLDOUT=0
/ARCHITECTURE
AUTOMATIC=YES
(MINUNITS=1
MAXUNITS=50)
/CRITERIA
TRAINING=BATCH
OPTIMIZATION=SCALED
ONJUGATE
LAMBDAINITIAL=0.0000005
SIGMAINITIAL=0.00005
INTERVALCENTER=0
INTERVALOFFSET=0.5
MEMSIZE=1000
/PRINT CPS
NETWORKINFO SUMMARY
CLASSIFICATION
SOLUTION IMPORTANCE
/PLOT NETWORK
/STOPPINGRULES
ERRORSTEPS= 1
(DATA=AUTO)
TRAININGTIMER=ON
(MAXTIME=15)
MAXEPOCHS=AUTO

ERRORCHANGE=1.0E-4
ERRORRATIO=0.001
/MISSING
USERMISSING=EXCLUDE .
```

Resources	Processor Time	00:00:00.45
	Elapsed Time	00:00:00.47

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample.

These cases are excluded from the analysis.

Case Processing Summary

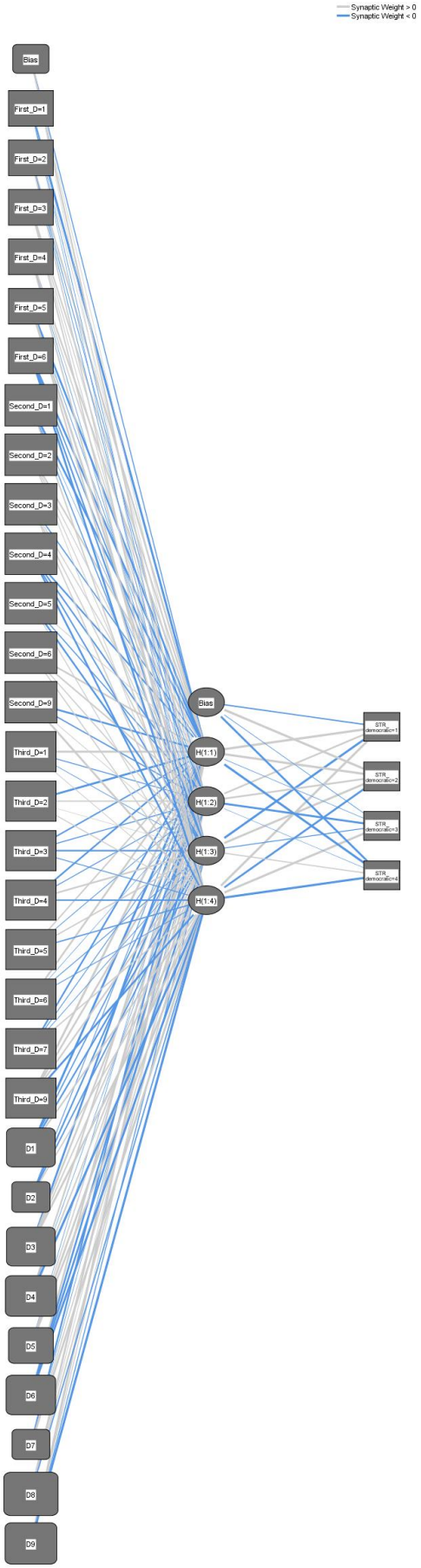
		N	Percent
Sample	Training	13	92.9%
	Testing	1	7.1%
Valid		14	100.0%
Excluded		90	
Total		104	

Network Information

Input Layer	Factors		
		1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

	9	BUREAUCRATIC RESPONSE
	Number of Units ^a	30
	Rescaling Method for Covariates	Standardized
Hidden Layer(s)	Number of Hidden Layers	1
	Number of Units in Hidden Layer 1 ^a	4
	Activation Function	Hyperbolic tangent
Output Layer	Dependent Variables	1 Democratic strategy
	Number of Units	4
	Activation Function	Softmax
	Error Function	Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent
 Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	23.404
	Percent Incorrect Predictions	38.5%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error ^a
	Training Time	0:00:00.03
Testing	Cross Entropy Error	4.525E-5
	Percent Incorrect Predictions	0.0%

Dependent Variable: Democratic strategy

a. Error computations are based on the testing sample.

Parameter Estimates

Predictor	Hidden Layer 1				Output Layer			
	H(1:1)	H(1:2)	H(1:3)	H(1:4)	[STR_democr atic=1]	[STR_democr atic=2]	[STR_democr atic=3]	[STR_democr atic=4]
Input Layer								
(Bias)	-.458	.067	.907	.021				
[First_D=1]	-1.862	.085	-.115	-.019				
[First_D=2]	1.076	-.194	-.125	.616				
[First_D=3]	.742	.295	.235	.666				
[First_D=4]	.837	.472	-.067	.725				
[First_D=5]	-1.276	-.123	1.603	.806				
[First_D=6]	-1.331	-.566	-.754	-1.504				
[Second_D=1]	-1.391	-.022	-.460	.657				
[Second_D=2]	.759	.252	.239	.180				
[Second_D=3]	-.527	.443	.534	.544				
[Second_D=4]	-.836	-.738	-.674	-1.145				
[Second_D=5]	.191	-.516	-1.023	.356				
[Second_D=6]	1.018	.750	.537	.522				
[Second_D=9]	-1.197	-.574	.127	1.524				
[Third_D=1]	1.621	-.450	-.103	.181				
[Third_D=2]	-1.580	.624	.024	.455				
[Third_D=3]	-.697	-.481	-.803	-.406				
[Third_D=4]	-.942	-.425	.990	-.688				
[Third_D=5]	.676	-.190	.669	-.584				

[Third_D=6]	1.254	-.013	-.271	-.221				
[Third_D=7]	-.876	-.226	-.172	.614				
[Third_D=9]	2.009	1.224	.832	-1.481				
D1	-1.890	-.538	-.828	.825				
D2	-.209	-.767	-.634	.622				
D3	-1.517	1.089	.629	1.612				
D4	.900	-.045	.685	-2.020				
D5	-.045	.501	1.546	1.286				
D6	1.171	-1.201	-1.410	-1.700				
D7	-1.026	-.052	.469	1.649				
D8	1.587	.124	.659	-.567				
D9	2.899	.276	-.421	-2.398				
Hidden Layer 1 (Bias)					-.590	2.928	-.116	-1.572
H(1:1)					3.100	2.503	-.065	-2.159
H(1:2)					1.038	1.047	-1.563	-.004
H(1:3)					-1.944	1.989	-.428	.534
H(1:4)					2.781	-1.502	2.486	-2.102

Classification

Sample	Observed	Predicted			Percent Correct	
		worst option	mediocre option	good option		best option
Training	worst option	0	4	0	0	0.0%
	mediocre option	0	4	0	0	100.0%
	good option	0	1	3	0	75.0%
	best option	0	0	0	1	100.0%
	Overall Percent	0.0%	69.2%	23.1%	7.7%	61.5%
Testing	worst option	0	0	0	0	0.0%
	mediocre option	0	1	0	0	100.0%
	good option	0	0	0	0	0.0%
	best option	0	0	0	0	0.0%
	Overall Percent	0.0%	100.0%	0.0%	0.0%	100.0%

Dependent Variable: Democratic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.075	73.8%

Second discourse in text	.096	93.9%
Third discourse in text	.091	89.2%
CONTACT RESTRICTION	.086	85.0%
SANITATION AND HYGIENE	.057	56.0%
ISOLATION OF INFECTED	.086	84.9%
TOTAL ISOLATION	.093	91.2%
HEALTH CARE	.075	73.9%
VIRUS DISSEMINATION	.089	87.1%
LIFESTYLE CHANGES	.055	54.5%
RIGHTS AND FREEDOMS INFRINGEMENT	.102	100.0%
BUREAUCRATIC RESPONSE	.095	93.2%

